

REMARKS

Re-examination and reconsideration of the subject application, in view of the remarks below, are respectfully requested.

Status of Claims

Claims 9-20 are pending in the application.

Claim Rejections – 35 U.S.C. § 103

In the Office Action, claims 9 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Smedberg (U.S. Patent No. 3,551,231) in view of Sands (U.S. Patent No. 3,390,035) and Andrusko (U.S. Patent No. 5,182,162). For the following reasons, this rejection should be withdrawn.

These references cannot be properly combined to reject the instant claims for two primary reasons. First, the proposed modification to Smedberg causes the invention of the reference to become inoperable or destroys its intended function. As correctly observed in the Office Action, Smedberg fails to disclose the step of extruding a heated sheet of adhesive material. Instead of extrusion, Smedberg discloses using an applicator roll 12 bearing a hot melt adhesive composition supplied from a reservoir 14. A pair of hold-down rolls 16 and 18 are positioned above the applicator roll 12 and are separated from the applicator roll 12 by a given distance and serve to maintain a specified pressure on the tufted structure 10 while it is in contact with the applicator roll 12. Col. 2, lines 57-65. Smedberg discloses that “[a]n essential feature of [its] process is the maintenance of a specifically determined pressure on the tufted structure while it is in contact with the applicator roll.” Col. 3, lines 49-51. Thus, the Smedberg invention is premised on the use of an applicator roll to apply the adhesive composition.

To arrive at the claimed invention, the Office Action relies on Sands and hypothesizes that it would have been obvious to persons skilled in the art to modify the process of Smedberg to use an extruder to apply the hot melt adhesive, rather than the applicator roll. However, because the applicator roll plays an essential part in the invention of Smedberg, replacing it with an extruder would destroy the intended purpose of the Smedberg invention and would render it inoperable. A proposed modification is

improper if the modification renders the reference inoperable for its intended purpose. *In re Fritch*, 972 F.2d 1260 1265 n.12 (Fed. Cir. 1992); *see also In re Gordon*, 733 F.2d 900, 901 (Fed. Cir. 1984); *In re Ratti*, 270 F.2d 810, 813 (CCPA 1959). Accordingly, this hypothesized modification to the Smedberg reference is improper.

Second, the combination of Smedberg and Andrusko is improper because there's no motivation or suggestion to use an adhesive that is only taught to make primary backing as the adhesive to bind the primary backing to the secondary backing in a carpet. Andrusko mentions the use of ethylene-methyl acrylate copolymer as a coating composition between the self-bonded nonwoven web and the cross-laminated thermoplastic net-like web. Col. 13, lines 27-43. The composite material can be used as a primary carpet backing. Col. 15, lines 29-34. There's no mention of using the ethylene-methyl acrylate copolymer to bind the primary backing material with a secondary backing material, even though a secondary backing is mentioned. Col. 15, lines 38-41. Thus, there's no suggestion or motivation in either Smedberg or Andrusko to make the combination as hypothesized in the Office Action.

In this connection, Applicants note the allegation in the Office Action that "there is no reason to believe one skilled in the art would not have utilized the same adhesive which was used to join the primary backing together to coat the same to attach the secondary backing." However, this allegation is irrelevant because it is not a suggestion or motivation to combine the references. Nor is it a suitable substitute for a suggestion or motivation to support a proper combination of the references.

Moreover, the statement is not even true. There are reasons why persons skilled in the art would not have used the same adhesive in different parts of a carpet. One, and most importantly, the reference doesn't disclose or suggest its use. Two, the different parts of a carpet are made of different materials and serve different functions. What works in one part may not necessarily be suitable in another part. Note that the primary backing of Andrusko is made of a self-bonded nonwoven web and a cross-laminated thermoplastic net-like web, while the secondary backing is made of woven synthetic or natural yarns. Col. 15, lines 38-41. So what is suitable to bind two webs together may not be suitable to bind a combined web with woven yarns. Three, Andrusko discloses that the carpet containing the primary backing is printed with a

geometric pattern before a secondary backing is added. Col. 15, lines 31-34. The presence of the geometric pattern may make the adhesive that binds the webs together unsuitable to bind the primary backing to the secondary backing. Presumably, if such adhesive were obviously suitable for that purpose, Andrusko would have mentioned it.

Sensing a lack of motivation or suggestion for combining Smedberg and Andrusko, the Office Action further mentions that Smedberg discloses ethylene/acrylate resins as an adhesive material for joining primary and secondary backings. But this disclosure doesn't provide the requisite suggestion or motivation either. It merely reflects an attempt to combine two incompatible teachings. Smedberg discloses ethylene/acrylate resins as a possible adhesive material for joining primary and secondary backings using an applicator roll. Andrusko, on the other hand, discloses ethylene-methyl acrylate copolymer as an adhesive for binding two webs using a melt extruder. These teachings are unrelated. They are directed to two different parts of a carpet using two different techniques. Thus, the teachings of one do not suggest a modification in another.

For the foregoing reasons, the applied references cannot be properly combined to arrive at the claimed invention. Accordingly, there's no *prima facie* case of obviousness, and the rejection should be withdrawn.

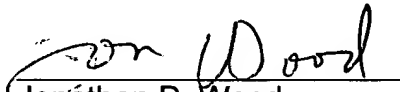
Claims 10, 12-14, 16, and 18-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Smedberg, Sands, and Andrusko further taken with Ballard. Claims 11 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Smedberg, Sands, Andrusko, and Ballard further taken with Kerr. And claims 14 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Smedberg, Sands, Andrusko, Ballard, and Kerr further taken with either WO 98/38375 or WO 98/38376. Since all of these rejections are based on Smedberg, Sands, and Andrusko, and since these references cannot be properly combined for the reasons mentioned above, all of these rejections are deficient at least for the same reasons as mentioned above. Accordingly, the rejections should be withdrawn.

Conclusion

In summary, Applicants believe the application to be in condition for allowance. Accordingly, the Examiner is respectfully requested to reconsider the rejection(s), remove all rejections, and pass the application to issuance.

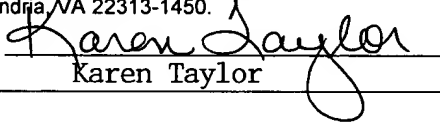
Respectfully submitted,

Eastman Chemical Company
P.O. Box 511
Kingsport, Tennessee 37662
Phone: (423)229-8862
FAX: (423) 229-1239


Jonathan D. Wood
Registration No. 39,076
1-18-05
Date

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